

Notice of Allowability

Application No.

09/274,430

Examiner

John B. Vigushin

Applicant(s)

BARROW, MICHAEL

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 17 March 2003.
2. ☒ The allowed claim(s) is/are 17, 18, 21-23, 25-28, 30, 31, 34-37 and 40-54.
3. ☒ The drawings filed on 22 March 1999 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other _____ |

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Notice of Allowability

1. The present Notice of Allowability is responsive to Applicant's Amendment filed March 17, 2003 (Certificate of Mailing date: March 11, 2003). The Examiner acknowledges the amendments to Claims 17, 18, 22, 30, 31, 34, 37 and 45-51, the cancellation of Claims 19, 20, 24, 29, 32, 33, 38 and 39, and the addition of Claims 52-54. Claims 1-16 were cancelled in a previous Amendment. Accordingly, Claims 17, 18, 21-23, 25-28, 30, 31, 34-37, 40-54 remain pending in the instant amended Application.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The Application has been amended as follows:

A) In the Specification, the following amendments have been made in accordance with the reference numbers in Fig. 4:

On p.7, line 14: "38" has been changed to --36--.

On p.7, line 17: "38" has been changed to --36--.

B) Claim 30 has been amended for the following reason:

(i) Claim 30 recites "said first plurality of contacts located in the outer region" (line 6), the Applicant intending said first plurality of contacts to be "outside a dimensional profile of said integrated circuit" (lines 13-14). For

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example, see first plurality of contacts 36 in Fig. 4 and 36' in Fig. 5 of the supporting disclosure, said **first plurality** of contacts being located in the **outer** region of the substrate. Claim 30 further recites "said second plurality of contacts located in the inner region" (line 7), the Applicant intending said second plurality of contacts to be "inside....a dimensional profile of said integrated circuit" (lines 13-14). For example, see second plurality of contacts 38 in Fig. 4 and the analogous central 4 x 4 array in Fig. 5 (no reference number) of the supporting disclosure, said **second plurality** of contacts being located in the **inner** region of the substrate and inside the dimensional profile of integrated circuit 18. Also, refer to Specification: p.7, lines 9-27, as amended in part A), above.

(ii) Accordingly, the following corrective amendment has been made to Claim 30, in the final three lines (i.e., lines 12-14):

"....wherein said first and second plurality of contacts are located respectively [inside] outside and [outside] inside a dimensional profile of said integrated circuit."

Allowable Subject Matter

3. Claims 17, 18, 21-23, 25-28, 30, 31, 34-37, 40-54 allowed.
4. The following is an examiner's statement of reasons for allowance:

As to Claims 17, 18, 21-23, 25-28 and Claims 53-54, patentability resides in **the combination of** *the first plurality of contacts located in a four-by-four matrix in the first (inner) region **and** a smallest distance between adjacent contacts in both the first (inner)*

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and second (outer) regions being smaller than a distance between the first (inner) and second (outer) regions, in further combination with the other limitations of base Claims 17 and 53, respectively.

As to Claims 30, 31 and 34-37, patentability resides in **the combination of the smallest distances between adjacent contacts located in the inner and outer regions being smaller than a distance between the inner and outer regions and the first and second plurality of contacts being located respectively outside and inside a dimensional profile of the integrated circuit**, in further combination with the other limitations of base Claim 30.

As to Claims 40-44, patentability resides in *the first region being substantially equal to the dimensional profile of the integrated circuit*, in combination with the other limitations of base Claim 40.

As to Claims 45-52, patentability resides in *a center array of contact pads arranged in a four-by-four array*, in combination with the other limitations of base Claim 45.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Claims 17, 18, 21-23, 25, 26, 28, 27, 30, 31, 34-37, 40-54 of the instant allowed Application will be renumbered as Claims 1-30, respectively, for publication in the issued patent.

Examiner's Remarks

7. The Applicant asserts that there is no proof that the Semiconductor Group (Package Outlines) Reference Guide, dated 1995 by Texas Instruments (relied upon for the rejections of Claims 17, 18, 20-25, 29, 45, 47, 49 and 50 under 35 USC § 102(b) and Claims 28, 29 and 36 under 35 USC § 103(a) in the Examiner's previous Office Action of September 11, 2002) was published before the invention date of Applicant's Application (see Applicant's Remarks on p.11 of the instant Amendment filed March 17, 2003). Since the Examiner has no means to determine **with certainty** whether or not the Reference Guide (generally dated 1995 on the front page but also printed "Confidential" thereon) qualifies as prior art, i.e., was available to the public before the invention date of Applicant's Application (see Applicant's 37 CFR § 1.131 Declaration filed December 7, 2000), or whether the Reference Guide was ever made available to the public at all, and the Applicant evidently cannot make this determination of publication date or availability to the public either, the Examiner therefore withdraws the rejections of the above-cited claims that relied upon the Reference Guide.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Vigushin whose telephone number is 703-308-1205. The examiner can normally be reached on 8:30AM-5:00PM Mo-Fri.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on 703-305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7382 for regular communications and 703-308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

John B. Vigushin
Examiner
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jbv
July 13, 2003



DAVID L. TALBOTT
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